

### **REMARKS**

The Office Action dated March 8, 2007 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1-23 are amended to more particularly point out and distinctly claim the subject matter of the present invention. New claim 31 is added. No new matter is added. Claims 1-31 are respectfully submitted for consideration.

The Office Action rejected claims 1-12, 17, 18, and 21-30 under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,760,444 to Leung (Leung). Applicants submit that Leung fails to disclose or suggest all of the features recited in any of the pending claims.

Claim 1, from which claims 2-16 depend, is directed to a method for performing an address update in a communication system. It is indicated that an address update process needs to be performed, wherein location-related information about a mobile node is transmitted to a correspondent node of the mobile node if the address update process is performed. The correspondent node is authenticated in response to the indicating, the authenticating yielding identity information about the correspondent node. A determination is made as to whether the address update process is to be carried out, based on the identity information. The address update process is performed when the determining indicates that the address update process is to be carried out and omitting the

address update process when the determining indicates that the address update process is not to be carried out.

Claims 17, from which claims 18-25 depend, is directed to a mobile node for a communication system. An indicator unit is configured to give an indication when an address update process needs to be performed, location-related information about a mobile node being notified to a correspondent node of the mobile node if the address update process is performed. An authentication unit is configured to authenticate the correspondent node, the authentication unit being responsive to the indicator unit and configured to yield identity information about the correspondent node. A determination unit, responsive to the authentication means, is configured to determine whether the address update process is to be performed. An address update unit, responsive to the determination unit, is configured to carry out the address update process.

Claim 26, from which claims 27-30 depend, is directed to a system for performing address updates in a communication system. An indicator means give an indication when an address update process needs to be performed, location-related information about a mobile node being notified to a correspondent node of the mobile node if the address update process is performed. An authentication means authenticated the correspondent node, the authentication means being responsive to the indicator means and yielding identity information about the correspondent node. A determination means, responsive to the authentication means, determines whether the address update process is to be

performed. An address update means, responsive to the determination means, carries out the address update process.

The underlying problem of the present invention is that a mobile node cannot reliably make a location privacy decision, i.e. a decision on whether or not to keep its topological location private from a correspondent node, when a need to initiate a correspondent registration has been detected. The correspondent registration is a process during which a Binding Update is sent to the correspondent node, which gives the correspondent node and possible eavesdroppers a chance to deduce the geographical location of the mobile node with certain accuracy.

Applicants submit that each of the pending claims recites features that are neither disclosed nor suggested in any of the cited references.

Leung is directed to a mobile IP authentication mechanism in which a centralized database stores security associations for mobile nodes supported by multiple Home Agents. The underlying problem of the Leung invention is the physical limitation in the memories of the Home Agents, which makes it impossible for a Home Agent to store the security associations for all mobile nodes that could otherwise be supported by the Home Agent. Another underlying problem of the Leung invention is the administrative overhead related to the updates of the security associations. To overcome these drawbacks, Leung suggests a centralized repository as a source for security associations. The Leung invention relates to authentication carried out using the security associations stored in the centralized database.

Consequently, on contrast to the present invention, Leung does not relate to binding updates and reliably making a location privacy decision, i.e. a decision on whether or not to keep its topological location private from a correspondent node, when a need to initiate a correspondent registration has been detected. The correspondent registration is a process during which a Binding Update is sent to the correspondent node, which gives the correspondent node and possible eavesdroppers a chance to deduce the geographical location of the mobile node with certain accuracy.

Applicants respectfully submit that Leung fails to disclose or suggest at least the features of the correspondent node being authenticated in response to the indicating, the authenticating yielding identity information about the correspondent node, as recited in claim 1 and similarly recited in claims 17 and 26.

In column 2, Leung merely discusses the known operation of the Home and Foreign Agents when a mobile node moves away from its home network. Leung then refers to message exchange between the mobile node and a correspondent node by stating that the messages sent by the correspondent node are transmitted through the Home Agent to the care-of address of the mobile node. In other words, route optimization is not mentioned. Col. 2, lines 47-57 of Leung, to which the Office Action refers, relates to the Mobile-Home Authentication performed when a mobile node engages with a remote network segment (14). In this registration, location-related information about the mobile node is transmitted to the Home Agent, but not to a correspondent node as recited and

authenticated in response to the indicating, the authenticating yielding identity information about the correspondent node, as discussed above regarding claims 1 and 17. Thus, Gehrmann fails to cure deficiencies of Leung.

Based at least on the above, Applicants respectfully submit that the cited references fail to disclose or suggest all of the features of claims 13-16 and 19. Accordingly, withdrawal of the rejection under 35 U.S.C. 103(a) is respectfully requested.

As stated above, new claim 31 is added. Applicants submit that claim 31 recites features that are neither disclosed nor suggested in the cited references.

Applicants submit that each of claims 1-31 recite features that are neither disclosed nor suggested in any of the cited references. Accordingly, it is respectfully requested that each of claims 1-31 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

described in the present application (see col. 2 lines 47-50). Further, the corresponding node 18 referred to in Leung is not authenticated

Applicants submit that because claims 2-12, 18, 21-25 and 27-30 depend from claims 1, 17 and 26 these claims are allowable at least for the same reasons as claims 1, 17 and 26, as well as for the additional features recited in these dependent claims.

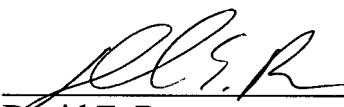
Based at least on the above, Applicants submit that Leung fails to disclose or suggest all of the features recited in claims 1-12, 17, 18 and 21-30. Accordingly, withdrawal of the rejection under 35 U.S.C. 102(e) is respectfully requested.

The Office Action rejected claims 13-16 and 19 under 35 U.S.C. 103(a) as being obvious over Leung, in view of US Patent No. 6,912,657 to Gehrmann (Gehrmann). The Office Action took the position that Leung disclosed all of the features of these claims except for the capability to use a certificate-based authentication protocol. The Office Action asserted that Gehrmann disclosed this feature. Applicants respectfully submit that the cited references taken individually or in combination, fail to disclose or suggest all of the features recited in any of the pending claims. Specifically, Leung is deficient at least for the reasons discussed above and Gehrmann fails to cure these deficiencies.

Leung is discussed above. Gehrmann is directed to an authentication mechanism for an ad hoc network, in which the public key of a device is hashed to a bit string which is encoded to a graphical string. The graphical string is read by an optical reader of another device which may then authenticate the said device by means of the graphical string. However, Gehrmann is silent with regards to the correspondent node being

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

  
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David E. Brown  
Registration No. 51,091

**Customer No. 32294**  
SQUIRE, SANDERS & DEMPSEY LLP  
14<sup>TH</sup> Floor  
8000 Towers Crescent Drive  
Tysons Corner, Virginia 22182-2700  
Telephone: 703-720-7800  
Fax: 703-720-7802

DEB:jkm

Enclosures: Additional Claim Fee Transmittal  
Check No. 16470